

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia

Dr Andrew Groves
Lecturer
School of Humanities and Social Sciences
Deakin University
AUSTRALIA

Contact author: Andrew Groves; andrew.groves@deakin.edu.au; +61 3 9246 8961

Abstract

Debate about alcohol and other drugs (AODs), particularly those that are illicit and/or subject to abuse, is pervasive in the community, media and at policy-level alike. While AOD use is commonly linked to the hedonistic social spaces of urban youth, especially with drugs like crystal methamphetamine (‘ice’), it is clear substance misuse is not merely a ‘city problem’. Considerations of place and space, particularly the notion of what it means to be rural, are central to understanding the diverse landscape of AOD use. This paper examines key determinants that shape the experience of rural AOD (mis)use and its influence on crime and criminality. Broad application of Shaw and McKay’s (1942) social disorganisation theory enables examination of rural AOD use and related crime in Australia through a lens of social *organisation*. Using this lens, the article employs a narrative review methodology to explore three key elements of the rural landscape: (i) accessibility of services; (ii) social and cultural pressures; and (iii) the structural and/or physical constraints of rural geography. Critical examination of these elements and associated narratives reveals the need for recognition of the human struggle linked to AOD use and related crimes as a dimension of both rural life and criminality. The article argues that the appropriate response to rural AOD use requires a paradigmatic shift from traditional law enforcement approaches to principles of harm reduction and public health. However, greater work is needed to produce evidence-based policy, address the causes of rural AOD use and provide meaningful support to this growing cohort of vulnerable members of the community.

Key words: Alcohol and other drugs; drug policy; rural consumption; social organisation; harm reduction



Introduction

Most research regarding crime and criminality has primarily focused on urban settings, exposing a lack of rural crime scholarship in criminology and criminal justice literature (Ward, Kirchner and Thompson, 2018; Carrington & Scott, 2008). By the same token, while considerable research has examined the misuse of alcohol and other drugs (AODs), much of the extant literature has either concentrated on major cities and regional centres (see Groves, 2015; Hutton, 2010; Measham & Moore, 2009; Degenhardt & Topp, 2002), and/or nascent hedonistic night-time economies (see Peacock et al, 2016; Groves, 2014; Miller et al, 2013; McCambridge et al, 2005). This trend is borne by official rates of AOD use and related crime, which have historically been higher in cities, detracting attention from rural consumption and crime. However, a small number of comparative studies of other AOD use settings have emerged (Fisher et al, 2017; Dixon & Chartier, 2016; Day et al, 2006), demonstrating that substance misuse – both licit and illicit – is not solely a contemporary urban or ‘city problem’. Moreover, recent data have revealed increased AOD use and related offending in regional and rural Australia, with growth occurring at a faster rate than in metropolitan areas (AIHW, 2018a, 2017, 2014; Sutherland & Millstead, 2016a).

Notably, this growth has been widespread across a range of both licit and illicit substances. For instance, despite a decline in overall use of methamphetamines (including new uptakes), users appear to have shifted from less potent forms such as ‘speed’, to consumption of the more potent crystal methamphetamine or ‘ice’ (Sutherland & Millstead, 2016a; AIHW, 2017). Furthermore, those living in ‘remote’ and ‘very remote’ rural/regional areas were 2.5 times more likely to have used methamphetamine than those from ‘major cities’, as reported in the 2016 National Drug Strategy Household Survey (NDSHS) (AIHW, 2017; AIHW, 2018a). Based on wastewater analyses, the regional average consumption of MDMA (3,4-methylenedioxymethamphetamine) was higher than capital city average consumption (AIHW, 2018a).

In terms of licit substances, in 2016 approximately 1-in-8 (12.8%) Australians reported having misused a pharmaceutical drug in their lifetime, with 1-in-20 (4.8%) reporting use in the previous 12 months (AIHW, 2017). By comparison, in 2013 approximately 40 percent of Australians reported drinking alcohol in risky ways or using illicit drugs in the previous 12 months. People living in remote or very remote areas were twice as likely as those in major cities to engage in these practices (AIHW, 2014). In 2016, this trend was sustained in relation to lifetime risky drinking, with a greater proportion of those in ‘outer regional/remote’ areas reporting risky drinking (24%) than those in ‘major cities’ (15%) (AIHW, 2018b). These trends are problematic since, in the same period, more than three-quarters (77%) of Australians aged 14 years and older reported consumption of alcohol in the preceding 12 months (AIHW, 2018b). These figures contribute to an annual social cost of alcohol misuse of \$14 billion, with further – often intensifying – consequences, including greater interaction with the criminal justice system (CJS), domestic violence and poorer health outcomes (AIHW, 2018b). Approximately a third (29%, or 7 million) of Australians live in rural and remote areas, locating rural AOD use as an important dimension of rural crime that requires pragmatic, evidence-based response.

In the same way that rural crime is a complex phenomenon that defies simple explanation (Scott & Biron, 2016, p. 16) and should not be ignored by criminology (Cebulak, 2004), so too then must discussion of rural AOD use be nuanced, not merely defined by its more developed urban counterpart. How AODs are manufactured, distributed and used, in

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

particular the social and practical value they offer users, is fundamentally embedded in notions of place and space (Weisheit & Donnermeyer, 2000; Weisheit & Wells, 1996). Indeed, the misuse of AODs in rural and regional areas not only differs from urban contexts, but also enables and/or masks myriad distinctive and dysfunctional behaviours, which challenge the imagery of the ‘rural idyll’ (Bell, 2006) and justify examination of these communities.

Few studies, though, have explored the nature and extent of AOD misuse in rural and regional areas, its impact on ongoing health and welfare needs and social, cultural and family values, or its influence on crime and criminality. To address this gap, this article examines the contemporary literature, to present a narrative review and exploration of the experiences of rural AOD use against a range of key social, cultural and structural determinants. Doing so seeks to provide an innovative perspective on rural AOD use practices, the drug-crime nexus and, importantly, how crime control/prevention measures may be best shaped through interdisciplinary collaboration to reduce AOD misuse in rural spaces.

Theoretical foundations: Social ‘organisation’

To unpack the relationship between place and space and AOD-related crime, this article employs a different reading of social disorganisation theory (see Shaw & McKay, 1942). Social disorganisation theory has been applied widely in criminological research, spanning both a long period and diverse contexts (Rogers & Pridemore, 2016; see also Bursik, 1988; Barnett & Mencken, 2002; Stallwitz, 2014; Ward et al, 2016). Many of these scholars have conceptualised the relationship between the structural characteristics of certain contexts and crime as a product of the level of social cohesion in those communities, based on evaluation of a series of inter-related factors, including – to varying degrees – the strength of social ties or *gemeinschaft*, socioeconomic status (SES), racial/ethnic heterogeneity, residential mobility, family interaction (or disruption), and the influence of peer groups, as elements of a broader framework of collective efficacy (Bursik, 1988; Stallwitz, 2014; Ward et al, 2016).

In this way, crime has typically been viewed as a consequence of social *disorganisation*, produced by poor or absent social networks, low-SES, high racial heterogeneity and population mobility, negative peer associations and reduced formal and informal social controls. In turn, much of the criminological literature has, historically, focused on urban settings through this lens, arguing that the level of ‘community’ or social integration inherent in rural areas creates “a system of social control that holds behavior in check and keeps crime rates lower” (Barnett & Mencken, 2002, p. 373). However, more recent studies have demonstrated the value of applying social disorganisation theory to non-urban contexts, to build new knowledge and better describe the relationship between rural places and different types of crime (see Donnermeyer, 2007), including in relation to drug use (see Stallwitz, 2014, for discussion of heroin subculture in rural Scotland).

It is with this frame in mind that the current article has been grounded, although – in line with the more recent approaches – employing social disorganisation in a way that diverges from its traditional foundations. Specifically, similar to Donnermeyer’s (2007, p. 2) contemporary unpacking of rural crime, the value of this article is that it views rural AOD use through a lens of social *organisation*. That is, it is not the lack of common values, the existence of abnormal or deviant praxis, nor the spread and threat of disorder that causes crime (the core of the social disorganisation thesis). Instead, it is the weight (for some, the

burden) and responsibility of fundamental social, cultural and family values, as well as structural/geographical constraints that contributes to the misuse of AODs and engagement in other forms of criminality. In essence, this approach questions what it means to be 'rural' and how this influences criminality, as well as the responses to it. This view represents a shift away from a more traditional and, too often, politicised 'law and order' perspective of AOD-related crime and the demonisation of the user (see Groves, 2014). Instead, it frames the problem in terms of the human struggle and experience, even 'victimisation', associated within living rural, where it is largely *because* of diverse social, economic, cultural and structural characteristics that some people in rural communities, and their families, become victims of the misuse of AODs.

This article also seeks to add to the work of others (see, for example, Stallwitz, 2014), by examining both alcohol *and* other drugs (AODs), concepts often inadvertently or unnecessarily separated. Indeed, how various forms of licit and illicit consumption co-exist, as well as influence levels of crime and criminality, while simultaneously being shaped by similar structural, social and cultural factors is of key interest and represents a further value of this approach. These determinants are equally wide-ranging and intense in their effects on rural communities. The analysis of these effects then, serves to challenge and extend stereotypical conceptions of AOD-related crime, and the rural alcohol and drug user, as well as evaluate how rural communities themselves, respond to AOD use. In this way, the theoretical framing of social *organisation* here, comprises identification and evaluation of two inter-related, but conceptually distinct elements identified in the social disorganisation literature – collective efficacy and community-mindedness (see Stallwitz, 2007).

As noted above, collective efficacy is often framed in terms of the inter-relationship between social control and community cohesiveness, specifically the ability of a community to control its members to create a safe and orderly social environment. From this perspective, greater collective efficacy is perceived to be associated with lower rates of crime (McVie & Norris, 2006; Stallwitz, 2014). This relationship is typically regarded as positive, whereby greater collective efficacy is viewed as a protective factor against crime, manifest through a community's capacity to maintain social order, often seen as a form of social capital (see Ansari, 2013). However, this perspective assumes that certain behaviours are objectively viewed as breaches of a uniform social order where, for example, drug use can only be regarded as dysfunctional, aberrant and immoral behaviour, which much of the contemporary research has revealed is not the case.

As described by Stallwitz (2014, p. 170), "the social *acceptability* and *function* of a certain behaviour – criminal and not criminal – in a specific *place* at a specific *time* fundamentally determines its frequency, intensity, and expansion" (emphasis in original). To this end, this article draws further from the work of Stallwitz (2012, p. 174), to augment collective efficacy with the concept of community-mindedness, which she describes as encompassing a "communal, caring attitude on the one hand and a strong degree of social control, exclusiveness, or even stigmatisation on the other...".

In essence, it is about how rural communities create and maintain certain values and norms. The value of encompassing both collective efficacy and community-mindedness as elements of social organisation, is that it enables evaluation of a community's attitudes towards certain behaviours, as well as its social capacity to achieve shared, related aims that, importantly, resist traditional labels of only criminal or legal. Accordingly, this article seeks to demonstrate the application of social organisation, to construct rural AOD use as an issue

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

of public health and social disadvantage, articulating the need for harm reduction, rather than merely a criminal justice response.

To provide the footings for this argument, this article uses a narrative review of the extant literature, examining three key elements of how AOD use is conceptualised in rural areas, as indicators of social organisation. Firstly, while limited accessibility and quality of services and support is often a characteristic of rural areas across many disciplines (for example healthcare, law enforcement, employment, etc.) (O’Toole & Burdett, 2004; AIHW, 2014), it is crucial to recognise the potential for acute and intense disadvantage for individuals affected by AODs, in rural areas already exposed to hardship. Specifically, how AOD-related services are provided and supported (economically, socially and even politically), the location of healthcare facilities and how these influence day-to-day rural life will be examined.

Secondly, the article examines socio-cultural norms and related pressures placed on individuals and communities and what impact these have on AOD consumption, which arguably describes a duality of sorts, whereby communities simultaneously embody both solidarity and isolation. In particular, discussion of the ‘rural idyll’ (Bell, 2006), the role of various forms of social capital, and adherence to conservative family and community values will be framed in relation to narratives of coping and self-medication (see de Lint et al, 2018), social isolation and increased risk of mental health and other social issues related to misuse of AODs (Ward et al, 2016; Berends, 2010; Veysey et al, 2008).

Thirdly, evaluation of the physical and geographical characteristics of the Australian rural landscape will also reveal unique dimensions relevant to the manufacture, distribution and use of AODs, encompassing recent changes in the type of drugs targeted, the practices of key figures in the illicit drug market, and our understanding of rural towns as sites of transition, as well as how this is shaped by changes in law enforcement policy. With regard to alcohol, discussion will focus on the opportunities for criminality provided by rural dimensions of space, privacy and isolation, examining alcohol-related violence and family violence.

Accessibility and provision of services

It is a truism of rural life that, like many other amenities, products and opportunities, specialist medical services and support – such as AOD-related facilities – are less accessible than in urban centres (AIHW, 2014; 2018b; Hegney et al, 2007). This has dual implications for people in rural and regional areas, many of whom experience poorer health outcomes, while also being more likely to engage in a range of behaviours associated with poorer health (AIHW, 2018b), including criminality.

Recognition is needed then, of how AOD use and related crime is experienced and addressed in rural areas differently (Cebulak, 2004), with a need to consider how conceptualisations of place shape responses to AOD-related harms. As Berends (2010, p. 604) notes, it is about how *we* (researchers, policy-makers, etc.) “account for rurality”. Within the context of this article, as well as the lens of social *organisation*, it is pertinent firstly, then, to examine the level of access to, and the nature and quality of service delivery, and secondly how this influences AOD use and related criminality.

Figure 1: Map of Australia¹



Firstly, and unsurprisingly, distance is relevant to the accessibility of treatment services for rural communities, particularly for those with AOD-related issues (Schoeneberger et al, 2006). Given the size and expanse of Australia (see Figure 1), many communities are located hundreds of kilometres away from key services, as well as each other, creating opportunities for isolation and constraining service provision. These limitations prevent prosocial help-seeking behaviour and, in some instances, may encourage and/or sustain criminality² through lack of visibility or surveillance. Concerns have been raised in Australia about service coverage, with a range of AOD services not available in some areas or, when available, offering few places, limitations that are accentuated as rurality increases (Berends, 2010; AIHW, 2018b).

As observed in New South Wales, rural participants reported significant barriers to accessing needle and syringe programs (NSPs), with fewer facilities frequently overwhelmed, as well as longer periods between the availability of important testing measures (such as blood-borne virus testing) (Day et al, 2006; Fisher et al, 2017). Limited access is a common experience for many drug users, largely shaped by the stigma and political reticence associated with illicit substances (Barbour, McQuade & Brown, 2017; Madden & Wodak, 2014). Even for legal substances, however, data reveal significant increases in hospitalisations associated with alcohol-related disease and injury in rural areas (Roxburgh, Miller & Dunn, 2013), with demand outstripping service provision.

These barriers force AOD users to seek assistance in other towns, outside of their own support and family networks, or deter individuals from seeking help at all. Given the limited accessibility and quality of services identified above, it is likely that individuals who are supported by close-knit communities may choose to avoid reporting their AOD use and/or seeking help, pushing them further away from essential support (Stallwitz, 2014). This displacement challenges typical conceptions of rural communities as strong and resilient

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

people who will, if necessary, seek help from others (Hegney et al, 2007), suggesting unique effects of stigma and criminalisation associated with AOD use. An example of such displacement was evident in regional South Australia in 2015, where several members of the community reported³ the need to travel from Mount Gambier to Adelaide (a drive of almost five hours or 430 kilometres/267 miles) to receive appropriate treatment for their AOD use (see Figure 2). A small number indicated that they were able to make the trip, while the majority – for various structural, economic or familial reasons (e.g. not having a car, insufficient funds, and/or employment or parental responsibilities) – did not, nor did they seek local assistance. Consequently, the use and associated harms of AODs are largely unknown to individuals’ families, local healthcare practitioners and other stakeholders that may have the capacity and are best-placed to support them. In this way, structural constraints and processes of displacement are characteristic of the social organisation of many rural communities, contributing to significant levels of under-reporting (see Stallwitz, 2014), which, paradoxically, prevent provision of appropriate support and resources.

To emphasise this point, it is worth noting that Mount Gambier has a population of approximately 28,700 at last Census count (ABS, 2017), placing it as the second largest city in the state of South Australia, behind the capital Adelaide which has a population of approximately 1.7 million. This describes an AOD use context that is not only geographically isolated/remote, but one that is also likely socially dissimilar, which says as much about the nature and extent of the problem of AOD use here as it does in relation to the rest of the state, in towns that are even smaller and more remote.

Figure 2: Map of South Australia⁴



The nature and quality of AOD-treatment services provided in rural areas is also limited by specific features of distance, such as access to specialist services. In practice, this means implementation of often basic programs required to manage a broad range of generic health issues across a larger geographic area, in order to provide cost-effective healthcare (Berends, 2010; see also Lee et al, 2011). Notably, the burden on these resources grows as remoteness increases, with corresponding limitations on service provision. Basic models of care and support are rationalised by economic and structural constraints, despite acknowledgement that AOD-use and service utilisation varies across location and that more tailored service models (including sharedcare, specialist treatment and outreach) are likely to have far more positive outcomes (Berends, 2010; Schoeneberger et al, 2006; Battye & McTaggart, 2003). Such a 'one-size-fits-all' approach arguably fails to address the acute and often unique determinants of substance misuse, including changes in use, related offending and help-seeking practices, not merely across different locations, but also across drug-types.

As noted by Sutherland and Millsteed (2016a; 2016b), in the context of Victoria, Australia, alone, there have been significant variations in both the prevalence of drug use and drug-related crime from 2007-2011 to 2012-2016. In addition to the rates of prevalence detailed in the introduction, in regional and rural Victoria, offending related to the use of methamphetamines and prescription drugs has significantly increased (Sutherland & Millsteed, 2016b). The relationship between increases in drug use and related crime and subsequent help-seeking behaviour is also significant. Specifically, the data reveals that in 2016-17, alcohol is the most common drug of concern for people presenting at AOD treatment services (32% of treatment episodes), though the fastest growing treatment area is for amphetamine use, with the number of episodes more than doubling in the last 5 years (to represent 26% of treatment episodes) (AIHW, 2018b).

Further, access to treatment, support and other services that may help to prevent harm, as well as criminality, is largely shaped by elements of culture. Although a number of these characteristics will be examined later in this article, it is important here to note how culture interplays with access. For many AOD users in rural communities, interest in treatment and support may be reduced as a result of cultural factors such as reluctance to identify as a 'user', familial responsibilities and lack of awareness of/education about support services (Berends, 2010), which are linked to geographical isolation. Indeed, akin to findings from the United States (see Lo & Stephens, 2002; Warner & Leukefeld, 2001), many individuals from communities in the south-east of South Australia⁵ (see Figure 2) did not identify as having an AOD 'problem', did not want to embrace the label of 'user', or were not aware of the level and type of supports available, while others sought to maintain a persona emblematic of family and community expectations. As such, discussion of the accessibility of services not only requires awareness of what support is needed and for what drug-types, but also for whom it is needed.

Secondly, it is also crucial to recognise the potential barriers for AOD users in rural areas, created by *how* services are provided. For instance, a feature of rural communities is that key services, such as health and support facilities, law enforcement, shops and other amenities are typically co-located in central public spaces (Coverdale, 2016; O'Toole & Burdess, 2004), most commonly the 'main street'. While this is economically, administratively and practically logical, it is problematic with regard to responding to AOD misuse and efforts to provide social and medical support to users and their families in a confidential manner (Day et al, 2006). For example, the likelihood of users seeking help initially, let alone the ongoing effectiveness of AOD treatment and rehabilitation services, is

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

significantly reduced when people are reluctant to access these facilities because these services are located next to the police station, or it is obvious to others in the town that they are seeking help for a substance “problem”. There is a perceived familiarity and visibility within these communities not experienced in other AOD-use contexts, which increases levels of stigma linked with substance misuse. Further, several Australian studies have highlighted the particular issues associated with contexts in which confidentiality is limited or absent, with variable reporting, myriad barriers to accessing treatment and distrust of support services (Day et al, 2006; Fuller et al, 2004). It is simultaneously a cultural and structural issue, complicated by the paradoxical nature of possible responses, whereby greater support for those affected and their families, does not necessarily require greater visibility and exposure (for example, individual house calls are preferred over centralised, generic drop-in services).

Similar to other fields (such as education), the recruitment and retention of AOD workers in rural and regional areas is equally problematic, with significant implications for the consistency and quality of service delivery (Berends, 2010). It is particularly concerning given that AOD use is widely acknowledged to be associated with complex mental health issues, more so than in the general population (Lee et al, 2011).

The problem with attracting and keeping AOD workers can be, at least in part, explained by a few key factors. As noted above, a tension exists between the need to provide generic, broad-based care to a large rural cohort, shaped by economic and structural limits, and the need to address a burgeoning problem with AOD use, which requires tailored and ongoing support. This creates conflict for workers who, Berends (2010) suggests, struggle to work simultaneously as ‘specialists’ and ‘generalists’. A further day-to-day concern for workers relates to the stigma associated with AODs. In contrast to general conceptualisations of stigma, which apply to the individual who is perceived to be ‘tainted’ or discredited (e.g. drug users), research suggests AOD workers are often stigmatised *by association*, labelled in similar ways to the user (Eaton, Ohan & Dear, 2015). This has clear implications for rural AOD support services as, in addition to issues of distance, there are likely to be gaps in service, under-qualified and/or overwhelmed staff, limited resources and a high-turnover of both personnel and, in turn, support practices/ideologies. Further, inconsistent strategies caused by limited funding and staffing issues that inevitably reduce service capacity, means there is an increased likelihood for people to ‘fall through the cracks’ (Fuller et al, 2004).

The social and cultural of ‘being rural’

The social and cultural milieux of both licit and illicit substance use have long and complex histories, with several seminal works shaping the direction and discourse of research within various AOD landscapes and engagement with diverse, heterogeneous populations (see, for example, Becker, 1963; Young, 1971; Parker, Aldridge & Measham, 1998; Hobbs et al, 2000). These influential studies, like many others that have followed, focused on the lived experiences and settings of users/use, examined social constructionist notions of deviance and criminality, and sought to explicate the socio-cultural norms, values and capital associated with AOD use.

In Australia, like most of the extant international literature, studies have largely explored the socio-cultural intricacies of primarily *urban* AOD settings, identified as a result of sharp increases in prevalence of use, community concern and political debate (see, for example, Peacock et al, 2016; Groves, 2014; Miller et al, 2013; Kemp, 2013). As noted

above, this has led to a dearth in rural AOD research in the criminological and criminal justice literature. While urban epidemiological studies are important to the field, it is imperative for researchers to recognise the distinctions between urban and rural AOD use settings. Rural-centric, or at least comparative, research is crucial, to not only identify the unique social and cultural determinants of rural consumption, but also the ways in which norms and values are shared intergenerationally, and how such knowledge may influence criminal justice responses and further academic study. Additionally, the effect on community attitudes and perceptions of AOD use, and on users in light of a long history of stigmatisation, further rationalises such an approach, given that public opinion is often shaded by the urban-focus and does not consider rural crime to be a major problem by comparison (Weisheit & Donnermeyer, 2000).

Greater recognition of the translational processes of intergenerational knowledge and praxis is vital, as these social and cultural values and practices become frames of reference for younger generations growing up in rural and regional towns typically with few (if any) alternative discourses and role models. Indeed, a key feature of the rural AOD experience relates to the social and cultural pressures placed on individuals and communities to adhere to particular forms of social capital. In common depictions of rural Australia, economic prosperity, strong family and community values, and traits such as strength, stability and resilience have traditionally been key forms of social capital that represent the rural idyll and have served to maintain informal social controls (Scott & Biron, 2016; Buikstra et al, 2010; Hegney et al, 2007, see also, Bell, 2006).

However, these forms of capital and their influence on social controls are arguably fragile. In juxtaposition to the intimacy and solidarity, or *gemeinschaft*, portrayed about these communities, there is simultaneously considerable physical distances between people and a perceived ‘hardness’ associated with rural living, emotional and social isolation, as well as pressure to adhere to sociocultural norms (Buikstra et al, 2010). The weight of these pressures is emphasised in towns dominated and, in many ways, reliant on the prosperity of one industry (such as timber, manufacturing, wool and so on) (Ward et al, 2018), where narratives of ‘community’ are especially strong. It is argued that these pressures create a series of social expectations, shaping displays of community-mindedness and collective efficacy (i.e. social *organisation*), in which it is the burden of these expectations – how a rural individual or community *should be* – that leads to the misuse of AODs.

In further unpacking social organisation, but viewed through a lens of *how things are*, it is widely documented that lower educational attainment, low socio economic status (SES) or poverty, and higher unemployment are factors that contribute to greater levels of crime, as well as AOD use (Dixon & Chartier, 2016; Roche, 2016; Henry, 2010; Seddon, 2006). As noted in a recent AIHW (2018a) report, those living in the lowest SES areas in Australia are twice as likely to have used methamphetamine as those living in the highest SES areas, data which is divided along rural/urban lines. Similarly, rural alcohol consumption has been linked to low-SES and lower levels of education, with greater reports of risky drinking, driving-under-the-influence and alcohol-related violence (Roxburgh et al, 2013).

A common feature of rural communities’ capacity to deal with crime, or their collective efficacy, is the prevalence and impact of poverty, manifest through various factors, including but not limited to, high unemployment, low wages, levels of low or unskilled labour and broader community hardship (Ward et al, 2018; Weisheit, Falcone & Wells, 2006). These conditions often serve to marginalise vulnerable individuals, with risk of

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

problematic AOD use disproportionately experienced by those already suffering from disadvantage (Seddon, 2006), which, in turn, increases exposure to the criminal justice system (CJS) and the stigma associated with criminalisation. Building on these foundations, limited education, delimited social relationships and a lack of awareness and/or capacity (i.e. social and economic capital) to change one’s situation, compounds experiences of isolation caused by physical separation. This places greater weight on social and cultural bonds and norms, which as noted by Oetting and colleagues (1998, p. 2075), are developed principally through exchanges with primary socialisation sources – the family, school and peers. Notably, cultural norms for AOD use are also transferred through these key relationships (Oetting et al, 1998), which is problematic in rural contexts where there are fewer socialisation sources, limiting the opportunity for alternative messages, thereby reinforcing existing norms and values. In this way, because rural communities are largely driven by a culture of ‘self-sufficiency’ (Hall et al, 2008), defined by a strong sense of independence and resilience (Buikstra et al, 2010; Hegney et al, 2007), individuals are reluctant to seek professional assistance and more likely to try to cope on their own.

Although there have been few studies that have examined the contemporary nuances of what ‘living rural’ means in terms of its impact on AOD use, there is growing evidence of many people in rural communities misusing alcohol, illicit drugs (including ‘ice’) and increasingly licit prescription medications in their day-to-day lives (AIHW, 2014). It is argued that, for some, this is an example of ‘self-medication’ (see de Lint et al, 2017), where substance use represents a coping strategy (or component of resilience), needed to manage or ‘dull’ a multitude of individual or collective issues/burdens. For example, the isolation experienced by current generations of rural families, trapped by intergenerational experiences of loss caused by drought, as well as increased mental health breakdown and/or disaffection with the land are well known, particularly among youth who have seen the disappearance of local opportunities and services (see Hegney et al, 2007).

Each of these narratives represents a possible, and likely, foundation for AOD uptake and subsequent misuse in order to cope, in light of strong cultural encouragement of notions of self-sufficiency and ‘dealing with things on your own’. This is supported by the findings of previous mixed-method victim research undertaken by the author⁶ in South Australia from 2012-2015, in which participants – including many from rural communities – perceived that self-medication practices place individuals at greater risk of depression and suicide, social exclusion and stigma, as well as engagement in crime and the criminal justice system. Specifically, self-medication through use of AODs, without any form of guidance and/or regulation, was seen to lead to risky consumption of both illicit and prescription drugs, as well as binge-drinking or regular drinking of large amounts of alcohol (de Lint et al, 2017). As described in the previous section, such behaviour can further distance users from already hard-to-access, but vital support and treatment services, creating a cycle of harmful and increasingly less visible consumption, which reinforces the effect of these social norms.

Because AOD use is associated with experiences of victimisation, harm, and trauma (de Lint et al, 2018), which are in turn linked to re-victimisation and, sometimes, offending, scholars need to unpack the ways in which rural communities are socially organised. This highlights both the public health and criminological significance of examining rural AOD use through a dedicated rural lens, to build knowledge of these unique experiences and, through use of theoretical frames such as social organisation, identify appropriate harm reduction responses.

Equally, reliance on narrow, non-specific conceptions of rural AOD use are problematic if, compared with urban practices, certain forms of consumption are accepted as 'normal' by whole communities (Hall et al, 2008; Dixon & Chartier, 2016). As noted in the most recent evaluation of Australia's health (AIHW, 2018b), drinking alcohol is associated with a broad range of social and cultural activities, which serve to normalise its ongoing consumption. Such cultural framings or 'proximal situational triggers' (Toumbourou et al, 2013, p. 418), often understood as rites of passage, influence individuals' (particularly youth) perceptions of the appropriateness and associated risks of cultural consumption patterns, and more so than external or government messages/campaigns. This encourages individuals to perceive fewer risks and to engage in dysfunctional use practices (such as binge drinking), as well as diminish the value, and even existence, of any consequences (Hall et al, 2008). For example, in examining drinking cultures and hegemonic masculinity in sports clubs (a feature of Australian rural communities), Hart (2016) reported that although some progress has been made in specific locations, 'bad behaviour' persists in many settings, as a result of problematic and risky consumption practices, with excessive and binge drinking leading to violence on and off the sporting field. Through qualitative analysis of rural Australians' perceptions of alcohol use, Allan and colleagues (2012, p. 626) similarly revealed the perception that "...you're less complete if you haven't got a can in your hand", speaking to the pervasiveness of rural cultural norms and the potential impact of disproportionately higher burdens of harm compared with urban settings.

Campbell's (2000) important work examining hegemonic masculinity in rural New Zealand pubs, specifically its metaphorical framing of the *glass phallus*, must also be recognised here. By further challenging the rural idyll, the metaphor of the glass phallus – as being both *transparent* (in its function) and *invisible* (Campbell, 2000, emphasis in original) – is germane to the analysis of social organisation, in that it can be used to identify other rural settings as key social sites, where significant cultural meaning and value are constructed. Borrowing this metaphor, the 'footy club' becomes a social site (though there are others) that represents a microcosm for a much larger community problem. This is because the 'problem' is not delimited to concerns surrounding excessive drinking in this setting, but also that it is acknowledged, defended and even openly encouraged, as an accepted practice that shapes other characteristics central to notions of rurality, such as masculinity, resilience, and community-mindedness. This, in turn, sets the tone for social interaction, individual behaviour and acceptance of community values, such as the misuse of AODs as a coping mechanism and the lack of any real or meaningful discussion about it, as representative of the 'norm'. This is likely a product of the small scale of most rural towns and the high degree of inter-connectedness and familiarity within these communities, where 'everyone knows everything', and where AOD use becomes simultaneously *transparent* and *invisible*. Despite this knowledge, it is clear that – as recognised by Campbell (2000) – scholars must commission in-depth empirical analyses of the social organisation of rural communities to make visible the problem of AOD use, as well as provide meaningful responses to such behaviour.

These findings have obvious criminal justice implications for both policy and practice, in relation to the acknowledgment of the prevalence of the problem, as well as the formulation of appropriate cultural and practical responses to alcohol-related harms. Though it is beyond the scope of this article to engage in more in-depth analyses of the influence of alcohol on specific types of crime, the effects of excessive alcohol consumption are well-known across a range of crimes, such as physical assaults, driving-related incidents and, notably, domestic and family violence. Of note in this research, however, is the

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

acknowledgement that such cultural norms become self-reinforcing or reifying, where adherence to such community values is preserved by exclusion or marginalisation of those who are perceived to be different (Donnermeyer, Barclay & Jobes, 2002) – those that Scott and Biron (2016, p. 18) label the ‘rural other’. Identity and community acceptance then, are factors also embedded in individuals’ decision-making around AOD use, highlighting the role and influence of social and cultural capital (Allan et al, 2012). In this way, it is clear that both the determinants and consequences of AOD use exist well beyond specific points of consumption (i.e. the local bar, the ‘footy club’, etc.), requiring holistic cultural engagement with a range of elements of rural life (identity, resilience, cultural capital, the family, and so on), not merely an evaluation of the deviance associated with AOD use.

Remote and rugged: Geographical determinants of AODs

The link between place – in particular the conceptualisation of the ‘rural’ – and problematic AOD use is well-documented, particularly in the United States (Linneman & Wall, 2013; Dixon & Chartier, 2016; see also, D’Onofrio, 1997), though there has been some Australian literature (largely driven by the ‘ice epidemic’, see Roche, 2016; Roche & McEntee, 2017). As noted above, distance is a key factor in service accessibility, availability and effectiveness of treatment, as well as cultural understandings of how AOD use is experienced in rural settings. Further, it is argued that culture is profoundly influenced by the physical and economic environment, particularly in small towns “characterised by small and widely dispersed populations within rugged terrain and limited infrastructure” (Allan et al, 2012, p. 624). In this final section, the focus turns to some of the more structural elements of the rural AOD landscape, specifically in terms of criminality and relationships with law enforcement and the criminal justice system, which represent dimensions of rurality and crime generally.

There are well-established links between the physical characteristics and geography of rural landscapes and the manufacture, distribution and use of AODs (Dixon & Chartier, 2016; Hall et al, 2008; Allan et al, 2012). It has been an historical feature of rural communities that the production of illicit drugs – for example, cannabis – is well-suited to the space and privacy afforded by remote and rugged terrain and dense native vegetation (Swift et al, 2013; Cebulak, 2004). Despite law enforcement intervention, this subcultural practice remains a feature of the Australian drug landscape. Combined with the increased use of drugs, such as ‘ice’ (crystal methamphetamine), recently observed in rural communities (AIHW, 2017; Sutherland & Millstead, 2016a), there is evidence of significant growth in the use of rural spaces for the manufacture and distribution of a range of illicit drugs. This shift is, in part, likely a product of increased law enforcement and legislative reform in urban areas, which has pushed manufacturers to more remote locations to continue production. This is evident in the recent raids in rural New South Wales, Australia, where police successfully shut down a clandestine pill laboratory allegedly responsible for supplying ecstasy and other substances to the Defcon1 music festival held in Sydney, the capital city of New South Wales (see Kontominas, 2018).

Similarly, national reforms regarding the regulation of precursor chemicals – such as Project STOP, designed to limit the sale of pseudoephedrine, used in the manufacture of methamphetamines – have sought to constrain domestic production of methamphetamine in Australia and internationally (Groves & Marmo, 2009; Weisheit & Brownstein, 2016). However, although these regulatory efforts have been lauded as a success in many contexts, it is evident again, that the social organisation of rural communities is a fundamental factor in

the development of appropriate responses, which must be addressed by researchers. For example, as noted by Weisheit and Brownstein (2016) in their analysis of United States domestic meth production, not only have manufacturers mitigated against disruptions to local supply through sourcing precursors internationally, but many have also engaged in small town *gemeinschaft*-like practices that draw on the familiarity and interconnectedness of these communities.

Using a technique known as ‘smurfing’ (or ‘pharmacy hopping’, as it is known in Australia), manufacturers employ a small group of individuals who travel to several locations to legally purchase medications containing pseudoephedrine, often within regulatory limits, thereby negating legislative controls (Weisheit & Brownstein, 2016). This has obvious implications for criminal justice practice, in terms of the identification, tracking and prevention of drug-related harm, but also encompasses broader social issues, such as greater community and, often familial, involvement in criminality, as well as the unmeasurable practical and economic impacts on the community in relation to the legitimate sale of, and access to, over-the-counter medications. To this end, evaluation of individuals’ and various groups’ community-mindedness and capacity to acknowledge, let alone respond meaningfully to (i.e. their collective efficacy), AOD use and its related harms and the social and systemic determinants of this process, is an important element of the current theoretical lens and should be embedded within future research in the field.

To claim, however, that growth of a rural AOD economy is solely attributable to tough urban law-and-order policing and politics related to illicit substances diminishes the value of a rural lens and/or the development of a ‘rural criminology’, suggests a form of *disorganisation*, and overlooks the cultural reality faced by policy-makers, communities and families in these regions. Indeed, geographic location has been identified as a leading predictor of problematic alcohol consumption (Roxburgh et al, 2013). In the same way, the higher density of liquor outlets found in rural areas has also contributed to increased availability of alcohol, as well as greater experience of its associated harms (Allan et al, 2012). With respect to harms, it is evident that people in rural communities are more likely to drive under the influence of alcohol and to have experienced alcohol-related abuse compared with those in urban areas (Roxburgh et al, 2013). This suggests a complex relationship between remoteness and risk-taking behaviour, mediated by the need to travel long distances, shared values and patterns of behaviour and the reduced visibility or capacity of law enforcement.

In trying to unpack the ‘rural’, research must move beyond quantitative analyses of crime, though these are – of course – a necessary first step in identifying prevalence rates, as well as the influence of place and space on, for example, AOD consumption and related criminality. A key part of the process of developing a rural criminology, however, is to acknowledge that, compared with urban settings, rural communities tend to be qualitatively diverse social and cultural populations that occupy, and are defined by unique physical spaces (Ward et al, 2016). As noted throughout this article, this is largely a product of both the social and geographical isolation that many rural communities experience, that shapes their values and attitudes towards certain behaviours, such as crime.

Rural attitudes generally convey a lack of trust in government and/or external messages about harms and risks (Weisheit & Donnermeyer, 2000), driven by innate independence and desire for ownership of community issues, which results in less frequent reports of crime and a propensity for communities to deal with crime and deviance internally

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

(Ward et al, 2016). In this way, rural communities can be regarded as generally more community-minded, or at least as portraying a more unified sense of community, as well as having the capacity for self-governance – that is, they appear more socially organised – than their urban counterparts, presenting a more coherent shared narrative and capacity (Barnett & Mencken, 2002). This is despite the persistent agitation of populist media and political discourses, which romanticise about the rural idyll in order to label rural communities and their crimes as homogenous and in need of ‘fixing’ (see Donnermeyer & DeKeseredy, 2014).

To demonstrate the practical or ‘local’ consequences of such discursive clashes, I want to share and reflect upon a key event held in 2015, in which such efforts to ‘fix’ rural drug problems was acutely evident. Within the rural communities of Mount Gambier, Kingston and Naracoorte, which are located in the south-east of South Australia (refer again to Figure 2), residents were offered the opportunity for a community meeting/consultation in relation to the ‘ice epidemic’, invited as part of the National Ice Taskforce (DPMC, 2015). This community, as well as six others across Australia, were selected by the Taskforce and consulted on issues concerning ice (crystal methamphetamine) use and its related harms, despite little recognition from locals of the nature and scope of the problem posed by ice in their community. In fact, residents were surprised they were targeted, which had the effect of creating fear and confusion, rather than encouraging community-mindedness and mobilising resources in response.⁷ This experience, albeit brief, emphasises the importance of qualitatively engaging with communities, acknowledging how they are *organised* and drawing from their collective knowledge and capacity, rather than applying a top-down and, arguably, politically-driven strategy that assumes *disorganisation*.

Although these particular residents did not identify local concerns regarding AODs, it is clear that rural AOD consumption is defined, in part, by geographic factors or notions of ‘locality’. As noted by Campbell (2000, p. 579), *locality* is characterised by the length of connection to a particular area, notions of kinship and perceptions of a more ‘natural’ social order, which shapes and reinforces feelings of rural identity. In this way, it is likely that such *outsider* perspectives noted above, are less capable of identifying and responding to the nuances of certain subcultural forms of behaviour, for example, AOD use. Stallwitz’ ethnographic work in the Shetland Islands, Scotland (see Stallwitz & Shewan, 2004), is again valuable here, as it demonstrates the utility of the concept of community-mindedness in shaping notions of locality, particularly in explaining substance use in certain settings. A key finding of her work, was identification of how illicit substance use blended with the local pub culture of abusive drinking, for which the latter constituted a “shared cultural experience for the...population as a whole...to the extent that nondrinking is almost regarded as socially deviant” (Stallwitz & Shewan, 2004, p. 371). Stallwitz’ findings extend the discussion presented earlier in this paper, concerning the intersections between perceptions of *community* and subcultural drinking practices, by emphasising that – because of more accepting attitudes towards consumption – illicit drug use can also be regarded as a rural normal, rather than as abnormal or deviant. However, crucially, such subcultural acceptance or tolerance is not seen as boundless, with consumption delimited to the use of certain substances and not others (for example heroin, in the case of the Shetland Islands).

This is relevant to the Australian AOD use landscape, because what Stallwitz revealed is that the informal social controls employed by the Shetland community were effective in managing the problem of heroin use. That is, the community regarded heroin use as a ‘step too far’ – compared with consumption of alcohol, amphetamines, cannabis or ecstasy – which worked to constrain the overall heroin scene, in contrast with how it was experienced in

mainland Britain during the same period (see Stallwitz & Shewan, 2004). This is an example of community-mindedness and collective efficacy, which together challenge typical conceptions of substance use, otherwise viewed as reckless. As such, it is about recognition of the contextual nature of AOD use and the capacity of rural communities to *manage* such forms of consumption, which requires a public health and harm reduction-based approach.

In addition to recognising the influence of locality, it would be misguided of AOD researchers if they did not acknowledge the fundamental structural differences between rural and urban settings, and how these may identify other areas of concern (such as economic inequality, unemployment), relate to other forms of crime, or ultimately limit the effectiveness of subsequent AOD policy and practice. As Donnermeyer and DeKeseredy (2014) have argued, the social organisation of rural communities shapes the type and scope of crimes committed, which is further bounded by the physical space. As discussed above, it is the remoteness and isolation associated with geographical distance that, in many ways, facilitates and/or encourages the misuse of AODs, which is then further shaped by social and cultural influences. However, beyond AOD use itself, we must recognise the additional harms and criminality that often occur as a result of, or in combination with AOD use.

Perhaps the clearest example relates to the level of domestic violence committed in rural communities, where it is known that rural women are more likely to experience both domestic and family violence than women in cities or other urban areas (Campo & Tayton, 2015). The level of domestic violence in rural settings can be explained by factors related to both AOD use and what Donnermeyer and DeKeseredy (2014) term the “rural patriarchy”. Specifically, experiences of social and physical isolation, limited resources and tailored support and subsequent lack of education coalesce to foster an environment where domestic violence can flourish. As noted earlier, fear of shame and stigma, lack of privacy due to limited separation between police, healthcare professionals and victims (i.e. *gemeinschaft*), and difficulties in accessing support because of distance, limited transport options or financial incapacity (for example women not having their own income), are considerable and tangible constraints shaped by the physical bounds of rural AOD use. So, while others have found that AOD use may not feature as heavily in the commission of certain crimes as they are in urban settings (e.g. street crime, see Wells & Weisheit, 2004), it is clear they have deleterious consequences in key contemporary criminological issues, particularly in Australia.

Internationally, rural communities are similarly viewed as increasingly becoming points of transition or sites of smaller, but more mobile illegal enterprise for organised crime groups engaged in the illicit drug market (McElwee, Smith & Somerville, 2011; Donnermeyer, 2017), with manufacture and distribution shaped and/or facilitated by the practices of formal transport industries, as well as informal avenues such as outlaw motorcycle gangs. In Australia, there have been significant shifts for groups who manufacture and distribute illicit substances (ACIC, 2017), who – as a result of successful policing efforts – have seen the necessity and value in being more mobile and using diverse rural locations on popular trade routes between cities and towns. This has had some historical background, where outlaw motorcycle gangs – who have long been associated with the manufacture and distribution of illicit drugs – have been affected by legislative and policing changes (see Task Force Morpheus, ACIC, 2017), which have forced these groups to change their practices, engagement with drug markets and locations of production. Notably, these changes also tend to correspond with the characteristics of rural communities, making knowledge of how and why drug problems flow through and/or become embedded in a particular town crucial to broader understanding of the AOD landscape.

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

The likelihood of illicit production activities becoming embedded in a rural community will, of course, be affected by the level of law enforcement presence and response (Cebulak, 2004). However, it is also important to recognise the social and economic determinants that sustain illicit drug production operations. As noted by Donnermeyer, Barclay and Jobes (2002), rural communities experiencing economic hardship (long-term drought, for instance) are likely to suffer strain that will encourage AOD use and production, particularly in areas where there is high levels of unemployment, low-SES groups and lower educational attainment. As such, it is argued that – in addition to the factors examined throughout this article, specifically, distance, isolation and access – another product of ‘rurality’ is that there may be less community concern regarding the illicit production and distribution of AODs, because of the economic and other benefits brought to the community.

As noted by Ward and colleagues (2016), economic prosperity may actually contribute to greater levels of crime, as it draws other groups into rural communities willing to ‘turn a blind eye’. This is, of course, a contentious claim that requires further empirical testing, but that nonetheless captures some of the nuance regarding the influence of geographical determinants on AOD use and broader incidence of crime. Furthermore, it highlights that critical assessment of the central themes of this paper – accessibility of services, social and cultural determinants and the physical space of rural AOD use – requires targeted, interdisciplinary and empirical evaluation, conceptually unique from urban-centric studies and that recognises rural AOD use as a dimension of a new rural criminology.

Conclusions

Approximately a third of Australians live in rural and/or remote areas, where various indicators (e.g. criminal justice, public health, social support) suggest communities experience complex and intersectional challenges caused by geographic and social isolation, difficulty accessing appropriate services, cultural expectations and other structural constraints linked to notions of rurality. Rural communities also experience poorer health, criminal justice and social outcomes than their urban counterparts, with those living in rural areas also more likely to engage in risky, harmful behaviours such as AOD misuse. This aptly describes the Australian rural experience; social, cultural, economic and structural constants that pose significant challenges to generations of rural families to overcome. Part of *understanding the rural* then, is to recognise the uniqueness of this AOD setting, to create and utilise a rural lens through which to undertake multi-disciplinary research and apprise evidence-based knowledge. Though it would be erroneous to claim that existing ecological theories of crime cannot be used to frame or explain rural crime settings, it is clear that what we garner from ‘the rural’ can be distinguished from urban lessons (past and future) and should be studied accordingly.

This paper sought to take a small first step in relation to this objective, examining a broad range of factors that shape the nature and scope of AOD misuse in rural Australia, recognising the social, cultural and, arguably, common human elements of AOD use as a dimension of rural crime. The findings reveal an increased, and growing, use of AODs in rural Australia. In describing a distinctive, *socially organised* group of individuals and their communities, in various ways affected by the misuse of AODs and related crime and criminality, a key outcome of this paper then, is that rural AOD use is not only a product of individual characteristics and decision-making, but also of what it means to ‘be rural’. This demonstrates that the use of AODs, particularly *illicit* substances, is significantly shaped by

distinctive social, cultural and environmental factors central to rural life. However, in being mindful of the power stigma, as well as not seeking to deflect responsibility, I argue that the rural identity should be viewed positively and as a means by which to identify and shape possible strategies, policies and reforms that can be implemented to evoke both practical and ideological change.

Why is a harm reduction and public health approach necessary?

As foreshadowed at the beginning of this article, the value of examining rural AOD use through the lens of social organisation is that it reveals an important and layered ‘so what?’ Specifically, the patterns of both AOD use and criminality described above, in particular their variability and socio-cultural motivations, suggest the need for an alternative response driven by harm reduction principles and a public health focus, implemented through a service and/or support system that is dynamic and adaptable to local conditions and changes.

This represents a paradigmatic shift from traditional law enforcement or criminal justice approaches concerned with AOD use, to a more pragmatic and measured human approach to the provision of meaningful and tangible support to this growing cohort of vulnerable members of the community. In addition, that scholars are now willing (and more able) to distinguish between rural and urban settings, represents the opportunity to unpack a further layer and inter-related feature of the AOD field. Harm reduction and public health approaches are, arguably, more adaptive and flexible to the type and extent of changes that is required here (Rhodes, 2002; Groves, 2018). Whereas the typical criminal justice response to the problem of rural crime has, largely, been the transfer of urban policies, practices and ideology, for which the success has been contentious even in urban settings, it is necessary to discriminate between these and non-urban settings given the distinctiveness of rural Australia. Indeed, in addition to the often secretive nature of illicit subcultures of alcohol and drug use, this environment is further shaped by issues of rurality, that is, the nature and extent of constraints and disadvantage attributable to the influence of concepts of masculinity, resilience, self-sufficiency, and so on, which makes talking about the problem much harder.

In this way, the application of harm reduction and public health ideology and praxis is crucial for building knowledge about, and responding to, rural AOD use and related criminality. It is about developing more positive and meaningful constructs and awareness of, for example, resilience and ‘toughness’, realised through the creation of more prosocial and open forms of communication and interaction, guided – in large part – by maintenance of notions of community-mindedness and collective efficacy. The benefit here is two-fold, in that these approaches emphasise the importance associated with building knowledge of the social, cultural and even familial structures within AOD-using scenes in the first instance. Secondly, they seek to furnish understanding of the relationship between AOD use related norms, values and behaviours, to create location-specific harm reduction interventions, which are typically conceptualised as ‘add-ons’, improvements to or bridges between existing programs and services, rather than as replacement or new practices. The latter represents a more pragmatic outcome, which in real terms, will likely reduce the practical or administrative burdens on both the criminal justice and health systems. It is about more efficient, effective and cooperative use of existing inter-disciplinary resources, rather than seeking to ‘throw the baby out with the bath water’.

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

Ideologically, focussing on harm reduction and public health is also valuable in that it challenges traditional ways of thinking about, or even the application of labels to, AOD use – that often construct use in terms of disorder, deviance and the dysfunction of the ‘other’ (Becker, 1963) – to instead frame AOD consumption more constructively. For example, as I have similarly noted in other drug use settings (e.g. pill testing), framing the response to AOD use using harm reduction and public health lenses, may serve to “drive discourse and action away from exclusively targeting theories of individual pathology, toward recognition of the social and environmental influences on behaviour and how problematic activities such as drug [and alcohol] use might be better managed through more pragmatic means and cooperation” (Groves, 2018, p. 5). Though it may not eliminate the use and impact of such labels completely, using a harm reduction and public health approach to AOD use will likely help to reduce the levels of stigma, shame and disadvantage often associated with substance use (Becker, 1963).

The benefits of reduced experiences of stigma and shame are manifold, though equally varied and complex. On the one hand, it may increase reporting by individuals who consume AODs, as well as the suitability and quality of both legislative and practical responses (particularly in terms of human service provision), while on the other hand, it may also serve to affect broader change in community attitudes and acceptance, leading to greater social inclusion. Furthermore, shaping the discourse in this way may help to frame AOD use in a more normative manner, as a ‘normal’ feature of many communities, preserving crucial social ties, reducing stigma and produce more positive outcomes for individuals and the community. This fits with the broader philosophy, noted by Stallwitz (2014, p. 194), that the focus of drug use related research should be on reducing harm and constraints to public health, rather than taking a ‘generally repressive approach’.

Recommendations for future scholarship

This article highlights the need for further empirical work and greater interdisciplinary collaboration, to deepen understanding of the causes and consequences of rural AOD use, as well as the protective factors that may serve to insulate rural communities from harm, and expedite the creation of evidence-based policy and support frameworks tailored to the rural Australian experience. This should take several forms, which reflects the diversity of the rural experience.

As noted by Stallwitz (2014, p. 171) in her examination of heroin users in Scotland, it is necessary to unpack and analyse both the fundamental “quantitative and qualitative local features, when specifying a place’s rurality or urbanity”. An obvious future direction for the current research then, would be to undertake empirical investigation of several key rural locations, employing a mixed-method analysis of the various features of social organisation identified here. In particular, future scholarly work should seek to empirically test the strength of social ties or *gemeinschaft*, socioeconomic status, racial/ethnic heterogeneity, residential mobility, family interaction (or disruption), and the influence of peer groups, as they relate to community-mindedness and collective efficacy.

In addition, future studies should seek to explain concepts such as community-mindedness and collective efficacy, what they mean to certain rural communities, and what factors and resources either inhibit or sustain them in relation to AOD use and related criminality. Notably, in this respect, explanations of these concepts should be examined at both the macro-level (broader community) and micro-level (specific AOD-using subcultures),

to produce a more comprehensive understanding of the link between AODs and what it means to be rural. Lastly, an important future direction for research would encompass the qualitative examination of rural community perceptions of, and engagement in, AOD self-medication, to further explicate the social, cultural and structural determinants of AOD consumption.

By examining a range of narratives and highlighting some of the interplay between key dimensions of rural AOD use, this paper does not provide comprehensive ‘solutions’, but rather it seeks to encourage robust interdisciplinary debate of ‘where to now?’ The process to find the answers to these questions, is in many ways emblematic of the broader journey of creating a rural criminology, of which the study of rural AOD use and related harms is one part. This is because AOD-related research and associated policy reform is (and must be) dynamic and adaptive, within which a series of paradigmatic shifts are needed – from criminal justice to harm reduction, from urban-centric to rural-inclusive and from individual pathology to products of *social organisation*. Such shifts are crucial to ensure an appropriate and meaningful response to what is a complex, often local, problem driven by a range of rural-specific social, cultural and structural determinants, not merely the deviant behaviour of the traditional (urban) ‘other’.

Endnotes

¹ Source: Global Road Map, 2019

² Either through uptake or continued use of illicit substances (or substances used illicitly, e.g. misuse of prescription of medication), or criminal behaviour associated with AOD use, such as acquisitive crime to fund use practices, or violence, reckless behaviour and other harmful activities as a result of intoxication.

³ This information was drawn from a series of community engagements in 2015, undertaken by the author in Mount Gambier, Naracoorte and Kingston, South Australia, facilitated by the Australian Science Media Centre through the Scientist in Residence program.

⁴ Source: created by author

⁵ This interaction was the result of an invitation from the Australian Science Media Centre, to engage with residents from Mount Gambier, Naracoorte and Kingston, South Australia, in 2015, to undertake research on the distribution and use of ‘ice’ in regional South Australia.

⁶ As part of a collaborative project with Willem de Lint and Marinella Marmo, and Victim Support Service South Australia. The project received ethics approval on 29 May 2012, from the Flinders University Social and Behavioural Research Ethics Committee, project no. 5377.

⁷ This was a common concern, raised by local residents identified through extensive consultation with the author, undertaken in 2015.

References

ABS (Australian Bureau of Statistics). (2017). *2016 Census Quickstats*, Canberra, ACT: Australian Bureau of Statistics. Retrieved from

**More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional
Australia – Groves**

https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/UCL412002

- ACIC (Australian Criminal Intelligence Commission). (2017). *Organised crime in Australia 2017*. Canberra, ACT: Australian Criminal Intelligence Commission.
- AIHW (Australian Institute of Health and Welfare). (2014). *National Drug Strategy Household Survey detailed report 2013*, Drug Statistics Series no. 28. Canberra, ACT: Australian Institute of Health and Welfare.
- AIHW (Australian Institute of Health and Welfare). (2017). *National Drug Strategy Household Survey detailed report 2016*. Drug Statistics Series No. 31. Canberra, ACT: Australian Institute of Health and Welfare.
- AIHW (Australian Institute of Health and Welfare). (2018a). *Alcohol, tobacco and other drugs in Australia* (online), cat. no. PHE 221. Canberra, ACT: Australian Institute of Health and Welfare. Retrieved from <https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia/contents/drug-types/meth/amphetamine-and-other-stimulants>
- AIHW (Australian Institute of Health and Welfare). (2018b). *Australia’s Health 2018: In Brief*, cat. no. AUS 222. Canberra, ACT: Australian Institute of Health and Welfare.
- Allan, J., Clifford, A., Ball, P., Alston, M. and Meister, P. (2012). “You’re less complete if you haven’t got a can in your hand”: Alcohol consumption and related harmful effects in rural Australia – The role and influence of cultural capital. *Alcohol and Alcoholism* 47(5), 624-629. <https://doi.org/10.1093/alcalc/ags074>
- Ansari, S. (2013). Social capital and collective efficacy: Resource and operating tools of community social control, *Journal of Theoretical and Philosophical Criminology Social Capital & Collective Efficacy*, 5, 75-94.
- Barbour, K., McQuade, M. and Brown, B. (2017). Students as effective harm reductionists and needle exchange organizers. *Substance Abuse Treatment, Prevention, and Policy*, 12(1), 15-21. <https://doi.org/10.1186/s13011-017-0099-0>
- Barnett, C. and Mencken, F. (2002). Social disorganization theory and the contextual nature of crime in nonmetropolitan counties. *Rural Sociology*, 67(3), 372-393. <https://doi.org/10.1111/j.1549-0831.2002.tb00109.x>
- Battye, K. and McTaggart, K. (2003). Development of a model for sustainable delivery of outreach allied health services to remote north-west Queensland, Australia. *Rural and Remote Health*, 3 (online), 194. <https://doi.org/10.22605/RRH194>
- Becker, S. (1963). *Outsiders: Studies in the sociology of deviance*. Glencoe, IL: The Free Press.
- Bell, D. (2006). Variation on the rural idyll. In P. Cloke, T. Marsden and P. Mooney (Eds.), *Handbook of rural studies* (pp. 149-160). London, UK: Sage. <https://doi.org/10.4135/9781848608016.n10>

- Berends, L. (2010). The emergence of a specialist role in rural alcohol and drug service delivery: Lessons from a review in rural Victoria, Australia. *Drugs: Education, Prevention and Policy*, 17(5), 603-617. <https://doi.org/10.3109/09687630802579164>
- Buikstra, E., Ross, H., King, C., Baker, P., Hegney, D., McLachlan, K. and Rogers-Clark, C. (2010). The components of resilience: Perceptions of Australian rural community. *Journal of Community Psychology*, 38(8), 975-991. <https://doi.org/10.1002/jcop.20409>
- Bursik, R. (1988). Social Disorganization and Theories of Crime and Delinquency: Problems and Prospects. *Criminology*, 26, 519-551. <https://doi.org/10.1111/j.1745-9125.1988.tb00854.x>
- Campbell, H. (2000). The glass phallus: Pub(lic) masculinity and drinking in rural New Zealand. *Rural Sociology*, 65(4), 562-581. <https://doi.org/10.1111/j.1549-0831.2000.tb00044.x>
- Campo, M. and Tayton, S. (2015). *Domestic and family violence in regional, rural and remote communities: An overview of key issues*. Melbourne, Vic: Australian Institute of Family Studies.
- Carrington, K. and Scott, J. (2008). Masculinity, rurality, and violence. *British Journal of Criminology*, 48(5), 641-666. <https://doi.org/10.1093/bjc/azn031>
- Cebulak, W. (2004). Why rural crime and justice really matter. *Journal of Police and Criminal Psychology*, 19(1), 71-81. <https://doi.org/10.1007/BF02802576>
- Coverdale, R. (2016). Accessing justice in regional Australia: Evolving perspectives and contexts. In A. Harkness, B. Harris and D. Baker (Eds.). *Locating crime in context and place: Perspectives on regional, rural and remote Australia*, Sydney: The Federation Press.
- D'Onofrio, C. (1997). The prevention of alcohol use by rural youth. In E. Robertson, Z. Sloboda, G. Boyd, L. Beatty and N. Kozel (Eds.). *Rural substance abuse: State of knowledge and issues*. Rockville, MD: National Institute on Drug Abuse.
- Day, C., Conroy, E., Lowe, J., Page, J. and Dolan, K. (2006). Patterns of drug use and associated harms among rural injecting drug users: Comparisons with metropolitan injecting drug users. *Australian Journal of Rural Health*, 14, 120-125. <https://doi.org/10.1111/j.1440-1584.2006.00775.x>
- de Lint, W., Marmo, M., Groves, A. and Laughton, V. (2018). Knowledge exchange: Collaborative reflexivity on self-medicated victims of crime. *Current Issues in Criminal Justice*, 30(1), 19-33. <https://doi.org/10.1080/10345329.2018.12036105>
- de Lint, W., Marmo, M., Groves, A. and Pocrnic, A. (2017). Crime victims' self-medication: Findings from a study in South Australia. *International Review of Victimology*, 23(2), 159-177. <https://doi.org/10.1177/0269758016686280>
- Degenhardt, L. and Topp, L. (2002). 'Crystal meth' use among polydrug users in Sydney's dance party subculture: Characteristics, use patterns and associated harms.

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

International Journal of Drug Policy, 14(1), 17-24. [https://doi.org/10.1016/S0955-3959\(02\)00200-1](https://doi.org/10.1016/S0955-3959(02)00200-1)

- Dixon, M. and Chartier, K. (2016). Alcohol use patterns among urban and rural residents: Demographic and social influences. *Alcohol Research*, 38(1), 69-77.
- Donnermeyer, J. (2007). Rural crime: Roots and restoration. *International Journal of Rural Crime*, 1, 2-20.
- Donnermeyer, J. (2017). The place of rural in a southern criminology. *International Journal for Crime, Justice and Social Democracy*, 6(1), 118-132. <https://doi.org/10.5204/ijcjsd.v6i1.384>
- Donnermeyer, J. and DeKeseredy, W. (2014). *Rural criminology: New directions in critical criminology*. New York, NY: Routledge. <https://doi.org/10.4324/9780203094518>
- Donnermeyer, J., Barclay, E. and Jobes, P. (2002). Drug related offenses and the structure of communities in rural Australia. *Substance Use and Misuse*, 37(5-7), 631-661. <https://doi.org/10.1081/JA-120004277>
- DPMC (Department of the Prime Minister and Cabinet). (2015). *Final report of the National Ice Taskforce*. Canberra: Commonwealth of Australia. Retrieved January 2017 from https://www.dPMC.gov.au/sites/default/files/publications/national_ice_taskforce_final_report.pdf
- Eaton, K., Ohan, J. and Dear, G. (2015). The stigmatisation of the provision of services for alcohol and other drug users: A systematic literature review. *Drugs: Education, Prevention and Policy*, 22(1), 19-25. <https://doi.org/10.3109/09687637.2014.977230>
- Fisher, K., Smith, T., Nairn, K. and Anderson, D. (2017). Rural people who inject drugs: A cross-sectional survey addressing the dimensions of access to secondary needle and syringe program outlets. *Australian Journal of Rural Health*, 25, 94-101. <https://doi.org/10.1111/ajr.12304>
- Fuller, J., Edwards, J., Martinez, L., Edwards, B. and Reid, K. (2004). Collaboration and local networks for rural and remote primary mental healthcare in South Australia. *Health and Social Care in the Community*, 12, 75–84. <https://doi.org/10.1111/j.1365-2524.2004.00470.x>
- Goldberg, T. (1999). *Demystifying drugs: A psychosocial perspective*. London, UK: Macmillan Press. <https://doi.org/10.1007/978-1-349-27618-9>
- Groves, A. (2014). Re-thinking the methamphetamine situation: Perceptions of risk and current policy dialogue. *Current Issues in Criminal Justice*, 26(2), 195-217. <https://doi.org/10.1080/10345329.2014.12036015>
- Groves, A. (2015). Young people’s perceptions of the risks of methamphetamine use in Adelaide nightclubs: A quantitative study. *Flinders Law Journal*, 17(1), 95-126.
- Groves, A. (2018). Worth the test? Pragmatism, pill testing and drug policy in Australia. *Harm Reduction Journal*, 15(12), 1-13. <https://doi.org/10.1186/s12954-018-0216-z>

- Groves, A. and Marmo, M. (2009). How to 'melt the ice' on the streets: A social-control analysis on the rise of methamphetamines within Australia and the need to reduce demand. *Current Issues in Criminal Justice*, 20(3), 413-432. <https://doi.org/10.1080/10345329.2009.12035820>
- Hall, J., Smith, D., Easton, S., An, H., Williams, J., Godley, S. and Jang, M. (2008). Substance abuse treatment with rural adolescents: Issues and outcomes, *Journal of Psychoactive Drugs*, 40(1), 109-120. <https://doi.org/10.1080/02791072.2008.10399766>
- Hart, A. (2016). Good Sports, drinking cultures and hegemonic masculinities in a community sporting club case study. *Drugs: Education, Prevention and Policy*, 23(4), 302-311. <https://doi.org/10.3109/09687637.2015.1136267>
- Hegney, D., Buikstra, E., Baker, P., Rogers-Clark, C., Pearce, S., Ross, H., King, C. and Watson-Luke, A. (2007). Individual resilience in rural people: A Queensland study, Australia. *Rural and Remote Health*, 7, 620-633.
- Henry, K. (2010). Skipping school and using drugs: A brief report. *Drugs: Education, Prevention and Policy*, 17(5), 650-657. <https://doi.org/10.3109/09687630902862452>
- Hobbs, D., Lister, S., Hadfield, P., Winlow, S. and Hall, S. (2000). Receiving shadows: Governance and liminality in the night-time economy. *British Journal of Sociology*, 51(4), 701-717. <https://doi.org/10.1080/00071310020015334>
- Hutton F. (2010). Kiwis, clubs and drugs: Club cultures in Wellington, New Zealand. *Australian and New Zealand Journal of Criminology*, 43, 91-111. <https://doi.org/10.1375/acri.43.1.91>
- Kemp, M. (2013, 2 September). Drug scourge: Methamphetamine use widespread in Adelaide nightclubs. *The Advertiser* (Adelaide). Retrieved from <https://www.adelaidenow.com.au/news/south-australia/drug-scourge-methamphetamine-use-widespread-in-adelaide-nightclubs/news-story/a3ada1f655ee66b01273d1b39dff4539>
- Kontominas, B. (2018, 5 November). NSW Police uncover clandestine Sydney drug lab allegedly linked to Defqon.1 overdose deaths. *ABC News*. Retrieved from <https://www.abc.net.au/news/2018-11-04/sydney-drug-lab-allegedly-linked-to-defqon-deaths/10463808>
- Lee, N., Jenner, L., Baker, A., Ritter, A., Hides, L. and Norman, J. (2011). Screening and intervention for mental health problems in alcohol and other drug settings: Can training change practitioner behaviour? *Drugs: Education, Prevention and Policy*, 22(2), 157-160. <https://doi.org/10.3109/09687631003727847>
- Linnemann, T. and Wall, T. (2013). 'This is your face on meth': The punitive spectacle of 'white trash' in the rural war on drugs. *Theoretical Criminology*, 18(3), 315-334. <https://doi.org/10.1177/1362480612468934>
- Lo, C. and Stephens, R. (2002). Arrestees' perceived needs for substance-specific treatment: Exploring urban-rural differences. *The American Journal of Drug and Alcohol Abuse*, 28, 623-642. <https://doi.org/10.1081/ADA-120015872>

More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional Australia – Groves

- Madden, A. and Wodak, A. (2014). Australia’s response to HIV among people who inject drugs. *AIDS Education and Prevention*, 26(3), 234-244.
<https://doi.org/10.1521/aeap.2014.26.3.234>
- McCambridge, J., Mitcheson, L., Winstock, A. and Hunt, N. (2005). Five-year trends in patterns of drug use among people who use stimulants in dance contexts in the United Kingdom. *Addiction*, 100(8), 1140–1149. <https://doi.org/10.1111/j.1360-0443.2005.001127.x>
- McElwee, G., Smith, R. and Somerville, P. (2011). Theorising illegal rural enterprise: Is everyone at it? *International Journal of Rural Criminology*, 1(1), 40-62.
<https://doi.org/10.18061/1811/51127>
- McVie, S. and Norris, P. (2006). *Neighbourhood effects on youth delinquency and drug use. The Edinburgh study of youth transitions and crime*. Edinburgh: Centre for Law and Society, University of Edinburgh.
- Measham, F. and Moore, K. (2009). Repertoires of distinction: Exploring patterns of weekend polydrug use within local leisure scenes across the English night time economy. *Criminology and Criminal Justice*, 9(4), 437-464.
<https://doi.org/10.1177/1748895809343406>
- Miller, P., Pennay, A., Droste, N., Jenkinson, R., Quinn, B., Chikritzhs, T., Tomsen, S., Wadds, P., Jones, S., Palmer, D., Barrie, L., Lam, T., Gilmore, W. and Lubman, D. (2013). Patron offending and intoxication in night-time entertainment districts (POINTED), Monograph Series No 46, National Drug Law Enforcement Research Fund.
- Morgan, F. (2016). Crime patterns: Measurement and evaluation of crime and deviance in rural and regional Australia. In A. Harkness, B. Harris and D. Baker (Eds.). *Locating crime in context and place: Perspectives on regional, rural and remote Australia*. Sydney: The Federation Press.
- O’Toole, K. and Burdess, N. (2004). New community governance in small rural towns: the Australian experience. *Journal of Rural Studies*, 20(4), 433-443.
<https://doi.org/10.1016/j.jrurstud.2004.01.002>
- Oetting, E., Donnermeyer, J., Trimble, J. and Beauvais, F. (1998). Primary socialization theory: Culture, ethnicity, and cultural identification – The links between culture and substance use. *Substance Use and Misuse*, 33(10), 2075-2107.
<https://doi.org/10.3109/10826089809069817>
- Parker, H., Aldridge, R. and Measham, F. (1998). *Illegal leisure: The normalization of adolescent recreational drug use*. London, UK: Routledge.
- Peacock, A., Norman, T., Bruno, R., Pennay, A., Droste, N., Jenkinson, R., Quinn, B., Lubman, D. and Miller, P. (2016). Typology of alcohol consumers in five Australian nighttime entertainment districts. *Drug and Alcohol Review*, 35, 539-548.
<https://doi.org/10.1111/dar.12370>

- Rhodes, T. (2002). The 'risk environment': A framework for understanding and reducing drug-related harm. *International Journal of Drug Policy*, 13(2), 85-94. [https://doi.org/10.1016/S0955-3959\(02\)00007-5](https://doi.org/10.1016/S0955-3959(02)00007-5)
- Roche, A. (2016). Ice and the outback: Meth in rural Australia. *Drug and Alcohol Research Connections*. Adelaide, SA: NCETA. Retrieved from <http://connections.edu.au/opinion/ice-and-outback-meth-rural-australia>
- Roche, A. and McEntee, A. (2017). Ice and the outback: Patterns and prevalence of methamphetamine use in rural Australia. *Australian Journal of Rural Health*, 25, 200-209. <https://doi.org/10.1111/ajr.12331>
- Rogers, E. and Pridemore, W.A. (2016). Research on social disorganization theory and crime in rural communities. In J. Donnermeyer (Ed.), *The Routledge international handbook of rural criminology*. Oxford, UK: Routledge. <https://doi.org/10.4324/9781315755885-4>
- Roxburgh, A., Miller, P. and Dunn, M. (2013). Patterns of alcohol, tobacco and cannabis use and related harm in city, regional and remote areas of Australia. *International Journal of Drug Policy*, 24(5), 488-491. <https://doi.org/10.1016/j.drugpo.2013.02.001>
- Schoeneberger, M., Leukefeld, C., Hiller, M. and Godlaski, T. (2006). Substance abuse among rural and very rural drug users at treatment entry. *The American Journal of Drug and Alcohol Abuse*, 32, 87-110. <https://doi.org/10.1080/00952990500328687>
- Scott, J. and Biron, D. (2016). An interpretive approach to understanding crime in rural Australia. In A. Harkness, B. Harris and D. Baker (Eds.), *Locating crime in context and place: Perspectives on regional, rural and remote Australia*. Sydney: The Federation Press.
- Seddon, T. (2006). Drugs, crime and social exclusion: Social context and social theory in British drugs-crime research. *British Journal of Criminology*, 46(4), 680-703. <https://doi.org/10.1093/bjc/azi079>
- Shaw, C. and McKay, H. (1942). *Juvenile delinquency and urban areas*. Chicago, IL: University of Chicago.
- Stallwitz, A. (2007). Heroin use in Shetland from the perspective of different local professionals. *Therapeutic Communities*, 28, 256-272.
- Stallwitz, A. (2014). Community-mindedness: Protection against crime in the context of illicit drug cultures? *International Journal of Rural Criminology*, 2(2), 166-208. <https://doi.org/10.18061/1811/61595>
- Stallwitz, A. and Shewan, D. (2004). A qualitative exploration of the impact of cultural and social factors on heroin use in Shetland (Scotland). *Journal of Psychoactive Drugs*, 36(3), 367-378. <https://doi.org/10.1080/02791072.2004.10400036>
- Sutherland, P. and Millsteed, M. (2016a). Recorded drug use and possession crime in metropolitan, regional and rural Victoria, 2006-2015. In *Brief*. Melbourne, Vic: Crime Statistics Agency.

**More than just a ‘city problem’: Drugs and alcohol (mis)use in rural and regional
Australia – Groves**

- Sutherland, P. and Millsteed, M. (2016b). What drug types drove increases in drug use and possession offences in Victoria over the past decade? *In Brief*. Melbourne, Vic: Crime Statistics Agency.
- Swift, W., Wong, A., Li, K., Arnold, J. and McGregor, I. (2013). Analysis of cannabis seizures in NSW, Australia: Cannabis potency and cannabinoid profile. *PLoS ONE*, 8(7): e70052. <https://doi.org/10.1371/journal.pone.0070052>
- Toumbourou, J., Evans-Whipp, T., Smith, R., Hemphill, S., Herrenkohl, T. and Catalano, R. (2013). Adolescent predictors and environmental correlates of young adult alcohol use problems. *Addiction*, 109(3), 417-424. <https://doi.org/10.1111/add.12401>
- Veysey, B., Andersen, R., Lewis, L., Mueller, M. and Stenius, V. (2005). Integration of alcohol and other drug, trauma and mental health services. *Alcoholism Treatment Quarterly*, 22(3-4), 19-39. https://doi.org/10.1300/J020v22n03_02
- Ward, K., Kirchner, E. and Thompson, A. (2018). Social disorganization and rural/urban crime rates: A county level comparison of contributing factors. *International Journal of Rural Criminology*, 4(1), 43-65. <https://doi.org/10.18061/1811/86153>
- Warner, B. and Leukefeld, C. (2001). Rural-urban differences in substance use and treatment utilization among prisoners. *The American Journal of Drug and Alcohol Abuse*, 27, 265–280. <https://doi.org/10.1081/ADA-100103709>
- Weisheit, R. and Brownstein, H. (2016). Drug production in the rural context. In J. Donnermeyer (Ed.). *The Routledge international handbook of rural criminology*. Oxford, UK: Routledge. <https://doi.org/10.4324/9781315755885-27>
- Weisheit, R. and Donnermeyer, J. (2000). Change and continuity of crime in rural America. In G. LaFree (Ed.). *Criminal justice 2000, Volume 1. Nature of crime: Continuity and change*. Washington, DC: National Institute of Justice.
- Weisheit, R. and Wells, L. (1996). Rural crime and justice: Implications for theory and research. *Crime and Delinquency*, 42(3), 379-397. <https://doi.org/10.1177/0011128796042003003>
- Weisheit, R., Falcone, D. and Wells, L. (2006). *Crime and policing in rural and smalltown America* (3rd edn). Long Grove, CA: Waveland Press.
- Wells, L. and Weisheit, R. (2004). Patterns of rural and urban crime: A county-level comparison. *Criminal Justice Review*, 29(1), 1-22. <https://doi.org/10.1177/073401680402900103>
- Young, J. (1971). *The drugtakers: The social meaning of drug use*. London, UK: McGibbon and Kee.